

REMARKS

Procedural Matters:

In the Preliminary Amendment filed with this application on September 15, 2005, it appears that the Specification amendments, including the Replacement Abstract, Substitute Specification, marked-up version of the Substitute Specification, and replacement drawing sheets, are not in the USPTO electronic file wrapper. Therefore, because Applicants' representative cannot ascertain whether these items were filed and not properly scanned by the USPTO, or not filed altogether, Applicants' representative is resubmitting the Replacement Abstract, Substitute Specification, marked-up version of the Substitute Specification, and replacement drawing sheets with this Amendment, as they were originally intended to be filed on September 15, 2005.

Amendments to the Specification and Abstract:

Applicants have amended the Specification to correct typographical errors, and to improve grammar and clarity. Applicants have amended the Abstract to remove reference numerals.

Amendments to the Claims:

Claim 33 has been amended to be directed from "a magnetic sensor-type antenna" to "a radio-controlled timepiece." Claim 33 has also been amended to include "a housing" and "a non-metal cover disposed in front of a dial surface." This amendment finds support in the specification at, for example, par. [0103] and Fig. 17. Further, the direction that end portions of the magnetic core are bent to is amended from "the direction away from the housing or a metal part of the housing" to "the direction toward the non-metal cover." This amendment finds support in the specification at, for example, par. [0050], lines 3-8.

In accordance with the amendment to claim 33, claims 34-39 have been amended to be directed from “a magnetic sensor-type antenna” to “a radio-controlled timepiece,” and in claims 35 and 36, the direction that end portions of the magnetic core is bent to is amended from “the direction away from the housing or a metal part of the housing” to “the direction toward the nonmetal cover.”

Claims 40-43 have been cancelled, without prejudice or disclaimer of their subject matter.

In claim 44, the phrase “a pair of magnetic sub-path members” has been amended to “a magnetic sub-path member,” and the phrase “without an air gap” has been added after the phrase “the magnetic core.” Claim 46 has been amended to be dependent from claim 44.

In claim 47, the word “being” has been deleted. In claim 48, the word “A” has been amended to “The.”

Claims 50 and 51 have been amended to be dependent from claims 44 and 47, and new claims 68 and 69 are dependent from claim 33.

Claim 52 has been amended to be dependent from claim 47 to correct claim dependency. Claims 53 and 54 have been amended to be dependent from claim 44 or 47.

In claim 55, the phrase “wherein the case is in contact with end portions of the magnetic core” has been added. This amendment finds support in the specification at, for example, par. [0087], lines 2-5; par. [0089], lines 1-5; and Fig. 14.

Claims 57, 58 and 61 have been amended to be in independent form including all of the recitations of original claim 55, because claim 55 has been amended as discussed above.

In claim 59, the phrase “the magnetic main path member comprising the magnetic core and the coil wound around the magnetic core” has been amended to “the magnetic core and the

coil wound around the magnetic core constitute a magnetic main path member, and wherein the magnetic main path member,” to overcome the 35 U.S.C. § 112, 2nd paragraph, rejection.

Claims 62 and 63 have been amended to be dependent from only claim 47, and new independent claims 70 and 71 include all of the recitations of original claims 62 and 63, and original claim 55, respectively.

Claim 64 has been cancelled without prejudice or disclaimer of its subject matter, and new claim 72 is dependent from claim 63 or 71.

Finally, claims 65-67 have been amended to be dependent from claim 47 or 55.

Upon entry of this Amendment, claims 33-39, 44-63, and 65-72 remain pending and under current examination.

Regarding the Office Action:

In the Office Action,¹ the Examiner took the following actions:

- (a) objected to Figures 23-24;
- (b) objected to claims 35 and 36 because of informalities;
- (c) rejected claim 59 under 35 U.S.C. § 112, second paragraph, as being indefinite;
- (d) rejected claims 33-35, 37-39, and 41 under 35 U.S.C. § 102(e) as being anticipated by Ihara et al. (U.S. Patent No. 7,170,462) (“Ihara”);
- (e) rejected claims 42-46, 55, 56, 59, 60, and 65-67 under 35 U.S.C. § 103(a) as being unpatentable over Ihara;
- (f) objected to claims 36, 57, 58, 61-64 as being dependent upon a rejected base claim, but indicated that these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims; and
- (g) allowed claims 47-54.

¹ The Office Action may contain statements characterizing the related art, case law, and claims. Regardless of whether any such statements are specifically identified herein, Applicants decline to automatically subscribe to any statements in the Office Action.

Applicants traverse the objections and rejections for the following reasons.

Objection to the Drawings:

With respect to the objection to Figs. 23 and 24, Applicants respectfully refer the Examiner to the postcard filed with the Preliminary Amendment on September 15, 2005. On that postcard, the four sheets of replacement drawings, including Figs. 23 and 24 designated by a legend "Prior Art," are listed, and the postcard was date-stamped by the USPTO to acknowledge receipt of the listed materials. However, it appears that the replacement drawings are not in the USPTO electronic file wrapper, and thus, Applicants are re-filing the four sheets of replacement drawings with this Amendment.

In addition, as pointed out in the Preliminary Amendment filed on September 15, 2005, Applicants have amended Fig. 17 to change reference numeral "91" to "95"; amended Fig. 18 to also change reference numeral "91" to "95" and to add reference numerals "92 and 94"; and amended Figs. 23 and 24 to add the label "Prior Art." Four (4) sheets of replacement drawings, including amended Figs. 17, 18, 23, and 24 are attached with the filing of this Amendment.

Objection to Claims 35 and 36:

The amendments discussed above with respect to claims 35 and 36 overcome the objection to these claims. Applicants therefore respectfully request its withdrawal.

Rejection of Claim 59 under 35 U.S.C. § 112, 2nd ¶:

The amendments discussed above with respect to claim 59 overcomes the rejection under 35 U.S.C. § 112, 2nd paragraph. Applicants therefore respectfully request its withdrawal.

Rejection of Claims 33-35, 37-39, and 41 under 35 U.S.C. § 102(e):

Applicants request reconsideration and withdrawal of the rejection of claims 33-35, 37-39, and 41 under 35 U.S.C. § 102(e) as being anticipated by Ihara. The rejection of claim 41 has been rendered moot by the cancellation of this claim.

In order to establish anticipation under 35 U.S.C. § 102, the Examiner must show that each and every element as set forth in the claim is found, either expressly or inherently described, in Taylor I. See M.P.E.P. § 2131. Ihara, however, does not disclose each and every element of Applicants' claims. Specifically, Ihara does not disclose or suggest at least Applicants' claimed "radio-controlled timepiece, comprising" "a non-metal cover disposed in front of a dial surface, wherein end portions of the magnetic core are bent in a direction toward the non-metal cover" (claim 33).

In contrast to the claimed invention, Ihara discloses, in Fig. 1, a magnetic antenna comprising magnetic main path member 21, a coil wound around a ferrite core 21, magnetic sub-path members (12, 6, 19) bent in direction away from a housing 3 and having a gap 13. Therefore, the magnetic sub-path members (12, 6, 19) are bent on the opposite side of the housing (metal outer casing) 3, and thus parallel to a dial surface of the radio controlled timepiece, as shown in Figs. 9 and 10. As recited in claim 33, however, the "end portions of the magnetic core are bent in a direction toward the non-metal cover," and thus are perpendicular to the dial surface of the radio-controlled timepiece. This is shown, for example, in Fig. 17. (The reference to Fig. 17 is for illustrative and exemplary purposes only, and is in no way intended to limit the scope of the claim to the specific example illustrated therein.) Therefore, the end portions of the magnetic core are directed toward the incoming magnetic flux, resulting in gathering a lot of magnetic flux, thereby providing the antenna with high sensitivity. This is clearly different from that of magnetic sub-path members (12, 6, 19) disclosed in Ihara.

Since Ihara does not disclose each and every element of independent claim 33, Ihara does not anticipate Applicants' claim 33 under 35 U.S.C. § 102(e). Therefore, claim 33 should be allowable over Ihara. Dependent claims 34, 35, and 37-39 should also be allowable at least due

to their dependence from base claim 33. Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 102(e) rejection.

In addition, Applicants point out that Ihara does not qualify as prior art against the claims of the present application. First, the Examiner cites to Ihara as allegedly § 102(e) prior art. According to M.P.E.P. § 2136.03, however, if an international (PCT) application (*i.e.*, Ihara) was filed on or after November 29, 2000, but did **not** designate the United States or was **not** published in English under PCT Article 21(2), then the international (PCT) filing date can **not** be treated as a U.S. filing date. The reference may then only be applied under § 102(a) or § 102(b) as of its publication date, or under § 102(e) as of any later filing date of an application that properly claimed the benefit of an international application (if applicable). *See* M.P.E.P. § 2136.03(II). *See also* M.P.E.P. § 706.02(a). Ihara was filed on September 11, 2003, as a PCT application and designated the United States, however, it was published *in Japanese*. Because Ihara was not published in English, it **cannot** be applied as of its PCT filing date. In this case, Ihara only qualifies, if at all, under 35 U.S.C. § 102(a) or § 102(b) as of its publication date, and thus does not qualify under § 102(e).

Second, Ihara was published as a PCT application on March 25, 2004 and was published by the USPTO on July 7, 2005. On the other hand, the present application was filed on September 15, 2005 and claimed the benefit of priority from two Japanese applications, filed on November 27, 2003 and December 11, 2003, respectively. In this case, both of Applicants' foreign priority filing dates predate Ihara's earliest available date of March 25, 2004. Therefore, Ihara does not qualify as prior art against the present application.

After consideration of the preceding remarks, if the Examiner is not persuaded by Applicants' reasoning, Applicants respectfully request that the undersigned representative be notified by telephone so that Applicants may consider perfecting their claim to foreign priority

by submitting an accurate translation of JP 2003-397989 or JP 2003-413642, along with a statement that the translation is accurate. *See* M.P.E.P. § 201.15.

Rejection of Claims 42-46, 55, 56, 59, 60, and 65-67 under 35 U.S.C. § 103(a):

Applicants request reconsideration and withdrawal of the rejection of claims 42-46, 55, 56, 59, 60, and 65-67 under 35 U.S.C. § 103(a) as being unpatentable over Ihara.

The Examiner has not properly resolved the *Graham* factual inquiries, the proper resolution of which is the requirement for establishing a framework for an objective obviousness analysis. *See* M.P.E.P. § 2141(II), citing to *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), as reiterated by the U.S. Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, 82 USPQ2d 1385 (2007).

The Examiner has not properly ascertained the differences between the claimed invention and the prior art, at least because he has not interpreted the prior art and considered both the invention and the prior art as a whole. *See* M.P.E.P. § 2141(II)(B).

Specifically, Ihara does not teach or suggest at least Applicants' claimed "magnetic sensor-type antenna" comprising "a magnetic sub-path member attached to the magnetic core without an air gap, the magnetic sub-path member being made of a material having a smaller specific permeability than that of the magnetic core" (claim 44, emphasis added), or "a magnetic core and a coil wound around the magnetic core for receiving a radio wave; and a case in which the magnetic core and the coil are disposed, wherein the case is in contact with end portions of the magnetic core" (claim 55).

According to the Examiner, Ihara differs from the claimed invention because it does not disclose the different permeability between the magnetic main path member and the magnetic sub-path members, and between the case and the magnetic core. *See* Office Action, pp. 3-4. The

Examiner then alleges that the specific permeability is considered an obvious matter of design choice depending upon the desired characteristic of an antenna system. *See id.* at 4.

Ihara, however, discloses a magnetic antenna comprising magnetic main path member 21, a coil 11 wound around a ferrite core 21, a magnetic sub-path members (12,6, 19) bent in direction away from a housing 3 and having a gap 13. *See Ihara*, Fig. 1. Ihara's magnetic antenna has a gap 10 in a part of the magnetic path 1, which is configured so as to have magnetic resistance or magnetic permeability being different from those of other parts of the magnetic path. *See Ihara*, col. 8, ll. 39-52. Improved precision of the spacing distance of the gap 10 is required because the variations in the gain of the antenna take place depending on the gap spacing distance *See Ihara*, col. 25, l. 66 to col. 26, l. 3. However, it is difficult to precisely adjust the spacing distance of the gap 10 in Ihara, because the magnetic antenna is very small, resulting in difficulty of bulk production of the magnetic antenna.

In contrast to Ihara, the magnetic sensor-type antenna recited in claim 44 calls for "a magnetic main path member further comprising a magnetic core and a coil wound around the magnetic core," and "a magnetic sub-path member attached to the magnetic core *without an air gap*, the magnetic sub-path member being made of a material having a smaller specific permeability than that of the magnetic core" (emphasis added). That is, the magnetic sensor-type antenna recited in claim 44 has no gap in the magnetic sub-path member.

Moreover, Applicants submit that the Examiner's apparent reliance on common knowledge is improper. For example, with respect to claims 44-46, 55, 56, 59, and 60, the Examiner admits that Ihara "differs from the claimed invention because it does not disclose the different permeability between the magnetic main path member and the magnetic sub-path members, and between the case and the magnetic core." Office Action, pp. 3-4. However, in order to remedy this deficiency of Ihara, the Examiner alleges that "the specific permeability is

considered an obvious matter of design choice depending upon the desired characteristic of the antenna system.” Office Action, p. 4. In response, while common knowledge may be relied on to make a rejection, such rejections should be judiciously applied. *See* M.P.E.P. § 2144.03. Further, if common knowledge is relied on, the basis for such reasoning must be set forth explicitly. That is, the Examiner must provide *specific factual findings* predicated on *sound technical and scientific reasoning* to support his or her conclusion of common knowledge. *See* M.P.E.P. § 2144.03. The Examiner has thus apparently relied on common knowledge without specific factual findings predicated on sound technical and scientific reasoning, and without properly addressing the context of the elements recited claims 44-46, 55, 56, 59, and 60.

Therefore, Ihara, taken alone or in combination with “common knowledge,” does not teach or suggest each and every element of at least Applicants’ independent claims 44 and 55. Thus, the Examiner has not properly ascertained the differences between the claimed invention and the prior art.

In view of the reasoning presented above, independent claims 44 and 55 are not obvious over Ihara, and should therefore be allowable. Dependent claims 45, 46, 56, 59, 60, and 65-67 should also be allowable at least due to their dependence from base claim 44 or 55. Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 103(a) rejection.

Allowable Claims 36, 57, 58, 61-64 and Allowed Claims 47-54:

Applicants acknowledge with appreciation the indication of allowable subject matter in claims 36, 57, 58, 61-64 and the allowance of claims 47-54. For the reasoning presented above, including the explanation of the amendments made, Applicants submit that claims 36, 57, 58, 61-64, are all in condition for allowance, in addition to already allowed claims 47-54.

Conclusion:

In view of the foregoing, Applicants request reconsideration of the application and withdrawal of the objections and rejections. Pending claims 33-39, 44-63, and 65-72 are in condition for allowance, and Applicants request a favorable action.

If there are any remaining issues or misunderstandings, Applicants request the Examiner telephone the undersigned representative to discuss them.

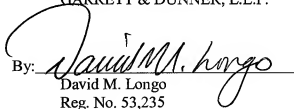
Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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Dated: August 1, 2008

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